

REMARKS

Claims 1-6, 17-26, and 44 are now pending in the present application. Claims 7-16 and 27-43 are withdrawn. Additionally, Claims 1 and 17 have been amended, and new Claim 44 has been added.

Applicant has carefully studied the outstanding Office Action. The present Response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of this application is respectfully requested. Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejections in view of the foregoing amendments and following remarks.

Claim Rejections - 35 USC §112

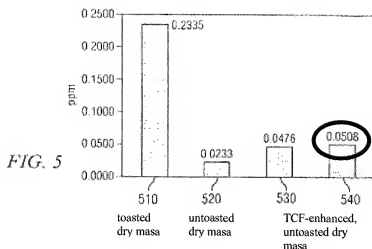
Examiner states on page 2 in this Office Action as follows:

Claims 1-3, 5, 17-22, 24 and 16 are rejected under 35 U.S.C. 112 as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the original disclosure for the claimed dimethyl-ethyl-pyrazine concentration or for the claimed colorimeter L-value. Applicant's spec. (page 28) and Fig. 5 do not support the first limitation above, and the spec. (page 20, lines 4-15) does not support the second limitation above, as applicant believes. Corrections are required.

For reasons discussed below, Applicants respectfully traverse this rejection under 35 U.S.C. § 112, first paragraph.

However, in an effort to advance prosecution as quickly as possible, independent Claims 1 and 17 have been amended to more closely reflect the language used in the original disclosure. As amended, Claims 1 and 17 – and therefore also the dependent claims 2-3, 5, 18-22, 24, and 26 by incorporation of all limitations from their respective base claims – now require that the

toasted corn flavor additive (or, more specifically, a regrind of toasted, sheeted, freshly-made masa dough derived from ground whole corn kernels) have “a dimethyl-ethyl-pyrazine concentration such that if said regrind were mixed with a sample of untoasted dry masa chips, said regrind would enable the resulting mixture to exhibit a dimethyl-ethyl-pyrazine concentration of about 0.05 ppm.” This limitation is clearly and incontrovertibly supported by Applicants’ Figure 5 and its accompanying description in the specification, beginning on page 27, line 20 through page 28, line 23 (with underlining added for emphasis):



In addition, product samples of untoasted, TCF-enhanced corn masa products contained twice as much dimethyl-ethyl-pyrazine as control samples of similar products made without TCF. [...] Figure 5 is a graph comparing the concentrations of dimethyl-ethyl-pyrazine found in standard toasted tortilla chips, untoasted dry masa chips without TCF additive, and untoasted dry masa chips with TCF additive. The results shown in Figure 5 were obtained by gas-chromatography/mass-spectrometry analysis (GC/MS). The vertical or y-axis of the graph in Figure 5 measures the concentration of dimethyl-ethyl-pyrazine in parts-per-million (ppm), while the horizontal or x-axis contains four vertical bars that represent the dimethyl-ethyl-pyrazine concentrations of four test samples. Reading from left to right, the four vertical bars represent the dimethyl-ethyl-pyrazine levels in standard toasted tortilla chips 510, untoasted dry masa chips 520, a first sample of untoasted dry masa chips having TCF additive 530, and a second sample of untoasted dry masa chips having TCF additive 540. Although the dimethyl-ethyl-pyrazine concentrations in the two TCF-enhanced samples 530, 540 were still significantly lower than the concentration in standard toasted tortilla chips 510, the dimethyl-ethyl-pyrazine concentrations of the two TCF-enhanced samples 530, 540 were more than double the amount present in the non-TCF-enhanced chips 520. Thus, the higher levels of dimethyl-ethyl-pyrazine

demonstrate a significant increase in toasted corn flavor with the use TCF additive.

As can be seen above, this limitation is clearly supported by the dimethyl-ethyl-pyrazine concentrations shown in Figure 5 and described on pages 27 through 28 of the Applicants' specification.

In addition, the color limitation of the claims has been amended to read "a colorimeter L-value of approximately 50," and the troublesome phrase, "but no greater than about 64," has been deleted to more accurately reflect the L-value of 49.2 of the toasted corn flavor sample as tested and described in Applicants' original specification on page 20, lines 5-10: "The right-most column shown in Figure 7 contains L-values that were measured using a Hunter-Lab colorimeter. The TCF sample had a significantly lower L-value (L-value of 49.2) than the Cargill Flavor Enhancer (L-value of 64.1) and the Lifeline Masa (L-value of 78.4)."

Applicants respectfully urge that the claims, as amended, overcome the rejection under 35 U.S.C. 112, and Applicants therefore request that such rejection be withdrawn.

Claim Rejections - 35 USC §103(a)

Examiner states on page 3 in this Office Action as follows:

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Salmon Patties" in view of Ellis et al (4,806,377) as set forth on pages 5-6 of the January 26, 2005, Office Action. Further, finding the optimum dimethyl-ethyl-pyrazine concentration and the optimum colorimeter L-value would require nothing more than routine experimentation by one reasonably skilled in this art.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Salmon Patties" in view of Ellis et al as applied to claims 1 and 5 above, and further in view of "A Dinner Experiment" and "Dried Food Products" as set forth on page 6 of said Office Action.

Claims 17-22, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Food Product Design” in view of “Salmon Patties” and Ellis et al as set forth on pages 7-8 of said Office Action. Further, see the last sentence in paragraph no. 5 above.

Claim 26 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al in view of “Salmon Patties” as set forth on pages 2-3 of the September 23, 2005 Office Action.

Applicants’ arguments with respect to claims 1-3, 5, 17-22, 24 and 26 submitted August 17, 2006, have been considered but are moot in view of the new ground(s) of rejection.

This rejection is respectfully traversed. None of the cited references, alone or in combination, discloses or suggests the invention claimed. Section 706.02(j) of the MPEP states that “[t]o establish a prima facie case of obviousness . . . the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Furthermore, there is no suggestion or incentive to combine the references. As stated in Section 706.02(j) of the MPEP, “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.”

As mentioned above with respect to the rejections under Section 112, independent Claims 1 and 17 have been amended to more closely reflect the language used in the original disclosure. As amended, Claims 1 and 17 – and therefore also the dependent claims 2-3, 5, 18-22, 24, and 26 by incorporation of all limitations from their respective base claims – now require that the toasted corn flavor additive (or, more specifically, a regrind of toasted, sheeted, freshly-made masa dough derived from ground whole corn kernels) have “a dimethyl-ethyl-pyrazine concentration such that if said regrind were mixed with a sample of untoasted dry masa chips, said regrind would enable the resulting mixture to exhibit a dimethyl-ethyl-pyrazine concentration of about 0.05 ppm.” This

limitation is clearly and incontrovertibly supported by Applicants' Figure 5 and its accompanying description in the specification, beginning on page 27, line 20 through page 28, line 23. In addition, the color limitation of the claims has been amended to read "a colorimeter L-value of approximately 50," and the troublesome phrase, "but no greater than about 64," has been deleted to more accurately reflect the L-value of 49.2 of the toasted corn flavor sample as tested and described in Applicants' original specification on page 20, lines 5-10.

Contrary to the Examiner's assertion, Applicants believe that the specific properties of the flavor additive set forth and isolated in their claims do in fact reflect a non-obvious improvement over the prior art flavor additives. The particular combinations of elements and properties, as defined in Applicants' claims, were not the product of mere routine experimentation. Applicants' claims group together relatively extreme characteristics that would not normally be combined intentionally (such as a freshly-made masa product that is intentionally overcooked or burned, which product has a low moisture content, very low oil content, dark/burnt color). Furthermore, there is absolutely no suggestion in the prior art to prepare and isolate, from freshly-made masa dough, the precise characteristics as outlined in Applicants' claims. Similarly, there is no suggestion in the prior art to prepare and isolate a toasted corn flavor additive having sufficient flavor intensity (with the toasted note indicated by dimethyl-ethyl-pyrazine concentration) to be capable of doubling the intensity of the toasted note of untoasted dry masa chips. As discussed above, Applicants' specification and figures reflect the additive's ability to increase the dimethyl-ethyl-pyrazine concentration in dry untoasted masa chips from 0.0233 ppm to 0.0476 ppm (in a first test with the dry untoasted masa

chips plus the additive), and 0.0508 ppm (in a second test with the dry untoasted masa chips plus the additive).

Note that Ellis, “Food Product Design,” “A Dinner Experiment,” and “Salmon Patties,” alone or in combination, do not teach or suggest all elements of Applicants’ claimed invention, as required by Section 706.02(j) of the MPEP. As previously explained in Applicants’ April 26, 2005 Response to Office Action dated January 26, 2005, page 17, lines 7-24, support for the dimethyl-ethyl-pyrazine (DMEP) concentration limitation can be found on page 28 of Applicants’ Specification, as well as in Applicants’ Figure 5. Support for the L-value limitation can be found on page 20, lines 4-15, of Applicants’ Specification: “As L-values measure the lightness of a sample, the TCF sample’s lower L-value demonstrates that TCF additive is darker in color than dry corn masa and corn germ flavoring.” In the same paragraph, Applicants note a specific example in which “[t]he TCF sample had a significantly lower L-value (L-value of 49.2) than the Cargill Flavor Enhancer (L-value of 64.1).” In fact, a word search for the terms “L-value” and “pyrazine” confirms that there is no mention or suggestion of such L-value and DMEP concentration limitations in any of the cited references, alone or in combination.

In light of the amendments and arguments presented above, Applicants submit that the totality of the evidence shows that Applicants’ invention defined in their Claims would have been non-obvious at the time of their invention.

CONCLUSION

It is respectfully urged that the subject application is patentable over the references cited by Examiner and is now in condition for allowance. Applicant requests consideration of the application and allowance of the claims. If there are any outstanding issues that the Examiner feels may be resolved by way of a telephone conference, the Examiner is cordially invited to contact William S. Wang at 972-367-2001.

The Commissioner is hereby authorized to charge any additional payments that may be due for additional claims to Deposit Account 50-0392.

Respectfully submitted,

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